

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-021320**Date Inspected:** 02-Mar-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Mr. An Qing xiang**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** Orthotropic Box Girder( OBG)**Summary of Items Observed:**

This CALTRANS OSM Quality Assurance Inspector (QA) Surendra Prabhu was present during the times noted above for observations relative to the fabrication of the Self Anchored Suspension (SAS) Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island, in Shanghai, China. QA observed and/or found the following:

Sub assembly bay- 1

This QA received ZPMC inspection notification sheet 08433 to perform dimensional inspection of Bike path Traveler Tail (TR) identified as 3005TR2. Dimensional inspections performed on this traveler rail include, but is not limited to overall length, beam sweep, flange tilt and flange warpage. The results of the inspection were recorded on Caltrans (CT) QA form OBG DCP Hand Measurements survey: Traveler Rails and submitted to CT QA lead for review and further action.

OBG Assembly bay- 14.

This QA Inspector randomly observed the following work in progress:

Shielded Metal Arc Welding (SMAW) repair welding of weld joint identified as DP3173-001-024. Welder is identified as 066002. ZPMC Quality Control (QC) is identified as Mr. Shi lei. The welding variables recorded by QC personnel observed appeared to comply with Welding Procedure Specification (WPS): WPS-345-SMAW-2G (2F)-FCM-repair. The repair welding was being performed as per Critical Welding Repair Report (CWR) No:

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B-CWR2816. This weld was previously rejected by ZPMC QC personnel and recorded on UT report B787-UT-19247.

SMAW repair welding of weld joint identified as SEG3020BB-073. Welder is identified as 067942. ZPMC Quality Control (QC) is identified as Mr. An Qing xiang. The welding variables recorded by QC personnel observed appeared to comply with WPS: WPS-345-SMAW-2G (2F)-FCM-repair. The repair welding was being performed as per Critical Welding Repair Report (CWR) No: B-CWR2752 Rev.2. This weld was previously rejected by ZPMC QC personnel and recorded on UT report B787-UT-18580R2.

SMAW repair welding of weld joint identified as DP3172-001-037. Welder is identified as 067588. ZPMC Quality Control (QC) is identified as Mr. Shi lei. The welding variables recorded by QC personnel observed appeared to comply with WPS: WPS-345-SMAW-2G (2F)-FCM-repair. The repair welding was being performed as per Welding Repair Report (WRR) No: B-WR20289. This weld was previously rejected by ZPMC QC personnel and recorded on UT report B787-UT-19247.

SMAW repair welding of weld joint identified as DP3174-001-018. Welder is identified as 066674. ZPMC Quality Control (QC) is identified as Mr. Shi lei. The welding variables recorded by QC personnel observed appeared to comply with WPS: WPS-345-SMAW-2G (2F)-FCM-repair. The repair welding was being performed as per Welding Repair Report (WRR) No: B-WR20313. This weld was previously rejected by ZPMC QC personnel and recorded on UT report B787-UT-20312.

Flux Cored Arc Welding (FCAW) welding of weld joint identified as SEG3020AJ-208. Welder is identified as 066359. ZPMC Quality Control (QC) is identified as Mr. An Qing xiang. The welding variables recorded by QC personnel observed appeared to comply with WPS: WPS-B-T-2233-ESAB.

FCAW welding of weld joint identified as FB3329-001-018. Welder is identified as 066673. ZPMC Quality Control (QC) is identified as Mr. An Qing xiang. The welding variables recorded by QC personnel observed appeared to comply with WPS: WPS-B-T-2132-ESAB.

ZPMC personnel performing weld back gouging for the weld identified as SEG3020BB-022. Refer the attached photos for reference.

AB/F QA Inspector performing Magnetic Particle Testing on weld back gouged areas for the weld joints identified as SEG3020R-020, SEG3020AG-005~007. Refer the attached photos for reference.

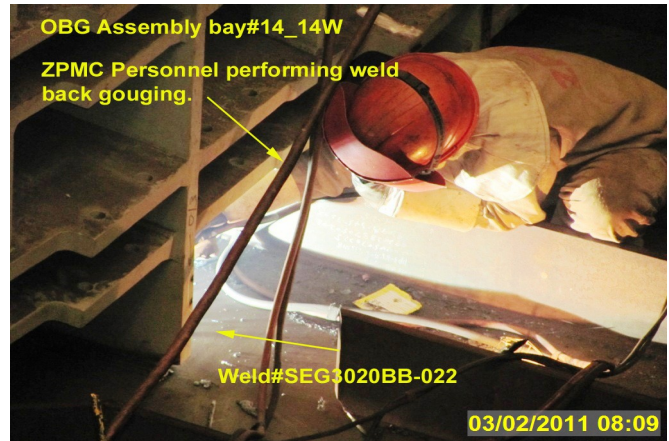
Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

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## Summary of Conversations:

No significant conversations were reported on this date.

## Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 15000422372, who represents the Office of Structural Materials for your project.

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**Inspected By:** Prabhu,Surendra

Quality Assurance Inspector

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**Reviewed By:** Peterson,Art

QA Reviewer